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Shepway Draft Core Strategy Review

Habitats Regulations Assessment

Prepared by LUC
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Client: Shepway District Council

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Contents

1	Introduction	1
	The requirement to undertake HRA of Development Plans	2
	Stages of the Habitat Regulations Assessment	3
	Structure of HRA Report	5
2	HRA Methodology	6
	Identification of European sites which may be affected by the Plan and the factors contributing to and defining the integrity of these sites	6
	Potential Impacts of the Draft Core Strategy Review on European Sites	8
	Assessment of 'likely significant effects' of the Draft Core Strategy Review Local Plan	9
	Interpretation of 'likely significant effect'	9
	Mitigation provided by the Draft Core Strategy Review Local Plan	10
	Screening assumptions and information used in reaching conclusions about likely significant effects	10
	Summary of screening assumptions	13
	Identification of other plans and projects which may have 'in-combination' effects	14
3	HRA Screening Assessment	15
	Screening assessment	15
	Summary of screening conclusions	24
4	HRA Screening Conclusion	26
	Appendix 1 – Attributes of European Sites	27
	Appendix 2 - HRA Screening of the Shepway District Core Strategy Review (Regulation 18 version, 2018)	32
	Tables	
	Table 1.1: Stages in HRA	3
	Table 2.1: Potential Impacts and Activities Adversely Affecting European Sites	8
	Table 2.2: Summary of screening assumptions	13
	Table 3.1: Summary of screening conclusions	24

1 Introduction

- 1.1 Shepway District Council commissioned LUC in May 2017 to carry out a Habitats Regulations Assessment (HRA) of the Review of the Shepway District Core Strategy Local Plan. The purpose of this HRA is to ascertain whether the proposals and policies within the Plan would be likely to result in significant effects on the qualifying features of European Sites within and adjacent to the District, and where such effects are predicted, whether they would result in adverse effects on site integrity following mitigation.

The Review of the Shepway Core Strategy

- 1.2 Shepway District Council formally adopted the Core Strategy in September 2013. The adopted Core Strategy sets out the strategic planning policy framework and strategic site allocations¹ for the District to March 2031, providing the basis for decisions on land use planning affecting Shepway District. The adopted Core Strategy seeks to strike an overall balance between regeneration aspirations and protecting the District's sensitive landscapes and habitats.
- 1.3 The Core Strategy Local Plan will soon be supplemented by the Places and Policies Local Plan (PPLP), which is programmed for adoption later in 2018. Once adopted, the PPLP will sit alongside the adopted Core Strategy allocating small and medium-sized sites for development and containing detailed development management policies to guide planning applications in the District.

Drivers for the Review

- 1.4 Since the adoption of Core Strategy in 2013, the Council has reviewed its Corporate Plan which now emphasises a commitment to Shepway residents enjoying a healthy, prosperous lifestyle and benefiting from high quality and affordable housing by making sure new homes are built in the district and by developing a sustainable and vibrant local economy.
- 1.5 The adopted Core Strategy plans to deliver a target of 8,000 new homes (with a minimum requirement of 7,000 new homes) during the plan period from 2006-2026. However, the latest demographic evidence indicates that the District's future housing need will be unmet unless new growth initiatives are brought forward.
- 1.6 While the Council prioritises development on brownfield land, recent Strategic Housing Land Availability Assessment (SHLAA) work undertaken to inform the preparation of the Places and Policies Local Plan has confirmed that the options for providing significant housing growth in the District appear to be limited due to the limited availability of brownfield land and the statutory designation of the Kent Downs Area of Outstanding Natural Beauty and the coverage of Romney Marsh by flood zone restrictions. The Council therefore envisages that future growth (beyond that allocated in the Core Strategy and Places and Policies Local Plan) cannot be provided by in-filling within existing settlement boundaries and therefore a new, visionary response to meeting future housing need will need to be identified.
- 1.7 Consequently, the Council commissioned two key updates to its Local Plan Evidence Base:
- An update to the District's Strategic Housing Market Assessment (SHMA)² to establish what the housing needs of the District are likely to be over the remaining period of the Core Strategy plan period and beyond.

¹ The two strategic site allocations and two strategic broad locations allocated within the adopted CS now have planning permission.

² Shepway Strategic Housing Market Assessment Available at: <https://www.folkestone-hythe.gov.uk/core-strategy-review/core-strategy-review-examination-2021-main-modifications>

- A Growth Options Study³ to identify and test potential approaches to strategic planning for growth in Shepway, to determine whether the District can meet its housing needs, and if so the most appropriate approach to do so.

1.8 Informed by the updated SHMA, the Growth Options Study, reviewed Corporate Plan and other updates to the District's Local Plan evidence base⁴, the Review of the Core Strategy plans for development and growth to at least 2036/37 and possibly beyond.

Approach to the HRA

1.9 The HRA of the Draft Core Strategy Review policies focuses on the new policies not included in the adopted Core Strategy (2013) and the adopted Core Strategy policies that have been significantly revised. Shepway District's adopted Core Strategy (2013) was subject to HRA and, therefore, the findings of this HRA are considered to remain valid for those existing policies or those which have not significantly changed. The adopted Core Strategy policies that have not materially changed have only been appraised through consideration of the in-combination effects with the Core Strategy Review as a whole.

1.10 However, this HRA does include an updated air quality assessment⁵, undertaken in light of a High Court judgement in April 2017. The judgement (colloquially known as the Ashdown Forest judgement) partially quashed the Lewes District and South Downs National Park Joint Core Strategy. This was on the basis that the HRA supporting the Joint Core Strategy only considered its own contribution to changes in traffic flows (and specifically whether such flows would exceed 1,000 Annual Average Daily Traffic) in determining whether there would be a likely significant air quality effect on Ashdown Forest SPA. The judge ruled that the HRA had thus explicitly failed to undertake any form of assessment 'in combination' with growth in other authorities that would affect the same road links and that this was in contravention of the Conservation of Habitats and Species Regulations 2010. The air quality assessment provided herein is based on a specific modelling of the location and scale of population growth proposed in the Draft Shepway Core Strategy Review, including proposed growth in neighbouring authorities likely to impact on the District's road network to avoid these problems.

HRA of the Places and Policies Local Plan

1.11 As background, LUC was previously appointed in 2016 to undertake a Habitats Regulations Assessment of the Regulation 18 stage of the Shepway Places and Policies Local Plan (PPLP). The HRA of the PPLP concluded that, subject to implementation of appropriate avoidance and mitigation measures, there would be no adverse effect on the integrity of European Sites. The findings of the HRA were supported by Natural England.

The requirement to undertake HRA of Development Plans

1.12 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in July 2007 and updated in 2010⁶ and again in 2012 and 2017⁷. Therefore, when preparing the Local Plan, Shepway District Council is required by law to carry out a Habitats Regulations Assessment.

1.13 The HRA refers to the assessment of the potential effects of a development plan on one or more European Sites, including Special Protection Areas and Special Areas of Conservation:

- SPAs are classified under the European Council Directive "on the conservation of wild birds" (79/409/EEC; 'Birds Directive') for the protection of wild birds and their habitats (including

³ Shepway Growth Options Study Available at: <https://www.folkestone-hythe.gov.uk/core-strategy-review/core-strategy-review-examination-2021-main-modifications>

⁴ For example, alongside the Growth options Study, the council have commissioned a high-level Landscape Appraisal used to inform the strategic review of the relative impacts of strategic level development in various locations.

⁵ AECOM, November 2017, *Air Quality Assessment of European Sites – Report to inform HRA of Shepway Local Plan*.

⁶ The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007. HMSO Statutory Instrument 2007 No. 1843. From 1 April 2010, these were consolidated and replaced by the Conservation of Habitats and Species Regulations 2010 (SI No. 2010/490). Note that no substantive changes to existing policies or procedures have been made in the new version.

⁷ The Conservation of Habitats and Species (Amendment) Regulations 2017.

particularly rare and vulnerable species listed in Annex 1 of the Birds Directive, and migratory species).

- SACs are designated under the Habitats Directive and target particular habitats (Annex I) and/or species (Annex II) identified as being of European importance.

1.14 Currently, the Government also expects potential SPAs (pSPAs), candidate SACs (cSACs) and Ramsar sites to be included within the assessment⁸.

- Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).

1.15 For ease of reference during HRA, these three designations are collectively referred to as European sites, despite Ramsar designations being at the wider international level.

1.16 The overall purpose of the HRA is to conclude whether or not a proposal or policy, or whole development plan would adversely affect the integrity of the site in question. This is judged in terms of the implications of the plan for a site's 'qualifying features' (i.e. those Annex I habitats, Annex II species, and Annex 1 bird populations for which it has been designated). Significantly, HRA is based on the precautionary principle. Where uncertainty or doubt remains, an adverse impact should be assumed.

Stages of the Habitat Regulations Assessment

1.17 **Table 1.1** below summarises the stages involved in carrying out HRA, based on various guidance documents^{9, 10, 11}

Table 1.1: Stages in HRA

Stage	Task	Outcome
Stage 1: Screening (the 'Significance Test')	Description of the plan. Identification of potential effects on European Sites. Assessing the effects on European Sites (taking into account potential mitigation provided by other policies in the plan).	Where effects are unlikely, prepare a 'finding of no significant effect report'. Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2.
Stage 2: Appropriate Assessment (the 'Integrity Test')	Gather information (plan and European Sites). Impact prediction. Evaluation of impacts in view of conservation objectives. Where impacts considered to affect qualifying features, identify alternative options. Assess alternative options. If no alternatives exist, define and evaluate mitigation	Appropriate assessment report describing the plan, European site baseline conditions, the adverse effects of the plan on the European site, how these effects will be avoided through, firstly, avoidance, and secondly, mitigation including the mechanisms and timescale for these mitigation measures. If effects remain after all

⁸ Department of Communities and Local Government (March 2012) National Planning Policy Framework (para 118).

⁹ Assessment of plans and projects significantly affecting European Sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, November 2001.

¹⁰ Planning for the Protection of European Sites. Guidance for Regional Spatial Strategies and Local Development Documents. Department for Communities and Local Government (DCLG), August 2006.

¹¹ The Appropriate Assessment of Spatial Plans in England. A guide to why, when and how to do it. RSPB. August 2007.

Stage	Task	Outcome
	measures where necessary.	alternatives and mitigation measures have been considered proceed to Stage 3.
Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation	<p>The Derogation Tests</p> <p>Demonstrate that there is no satisfactory alternative</p> <p>Identify 'imperative reasons of overriding public interest' (IROPI).</p> <p>Identify compensation to ensure favourable conservation status.</p>	This stage should be avoided if at all possible. Satisfying the derogation tests are extremely onerous.

- 1.18 In assessing the effects of the Shepway Core Strategy Review in accordance with Regulation 102 of the Conservation of Habitats and Species Regulations 2010, there are potentially two tests to be applied by the competent authority: a 'Significance Test' followed if necessary by an Appropriate Assessment which will inform the 'Integrity Test'. The relevant sequence of questions is as follows:
- Step 1: Under Reg. 102(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not –
 - Step 2: Under Reg. 102(1)(a) consider whether the plan is likely to have a significant effect on the site, either alone or in combination with other plans or projects (the 'Significance Test'). [These two steps are undertaken as part of Stage 1: Screening shown in **Table 1.1** above.] If Yes –
 - Step 3: Under Reg. 102(1), make an Appropriate Assessment of the implications for the site in view of its current conservation objectives (the 'Integrity Test'). In so doing, it is mandatory under Reg. 102(2) to consult Natural England, and optional under Reg. 102(3) to take the opinion of the general public. [This step is undertaken during Stage 2: Appropriate Assessment shown in **Table 1.1** above.]
 - Step 4: In accordance with Reg. 102(4), but subject to Reg. 103, give effect to the land use plan only after having ascertained that the plan will not adversely affect the integrity of the European site.
- 1.19 It is normally anticipated that an emphasis on Stages 1 and 2 of this process will, through a series of iterations, help ensure that potential adverse effects are identified and eliminated through the inclusion of mitigation measures designed to avoid, reduce or abate effects. The need to consider alternatives could imply more onerous changes to a plan document. It is generally understood that so called 'imperative reasons of overriding public interest' (IROPI) are likely to be justified only very occasionally and would involve engagement with both the Government and European Commission.
- 1.20 The HRA should be undertaken by the 'competent authority' - in this case Shepway District Council, and LUC has been commissioned to do this on its behalf. The HRA also requires close working with Natural England as the statutory nature conservation body in order to obtain the necessary information and agree the process, outcomes and any mitigation proposals. The Environment Agency, while not a statutory consultee for the HRA, is also in a strong position to provide advice and information throughout the process as it is required to undertake HRA for its existing licences and future licensing of activities.

Structure of HRA Report

- 1.21 This chapter has introduced the requirement to undertake HRA of the Shepway Core Strategy Review Local Plan. The remainder of the report is structured as follows:
- **Chapter 2: HRA Screening Methodology** sets out the approach used and the specific tasks undertaken during the screening stage of the HRA.
 - **Chapter 3: HRA Screening Assessment** assesses whether significant effects on European sites are likely to result from the implementation of the plan, either alone or in-combination.
 - **Chapter 4: Conclusion and Next Steps** summarises the overall HRA conclusions for the Core Strategy Review and outlines recommendations and, if required, the next stage in the process.

2 HRA Methodology

- 2.1 HRA Screening of the Draft Core Strategy Review Local Plan has been undertaken in line with current available guidance and to meet the requirements of the Habitats Regulations. The tasks that have been undertaken during the screening stage of the HRA are described in detail below.

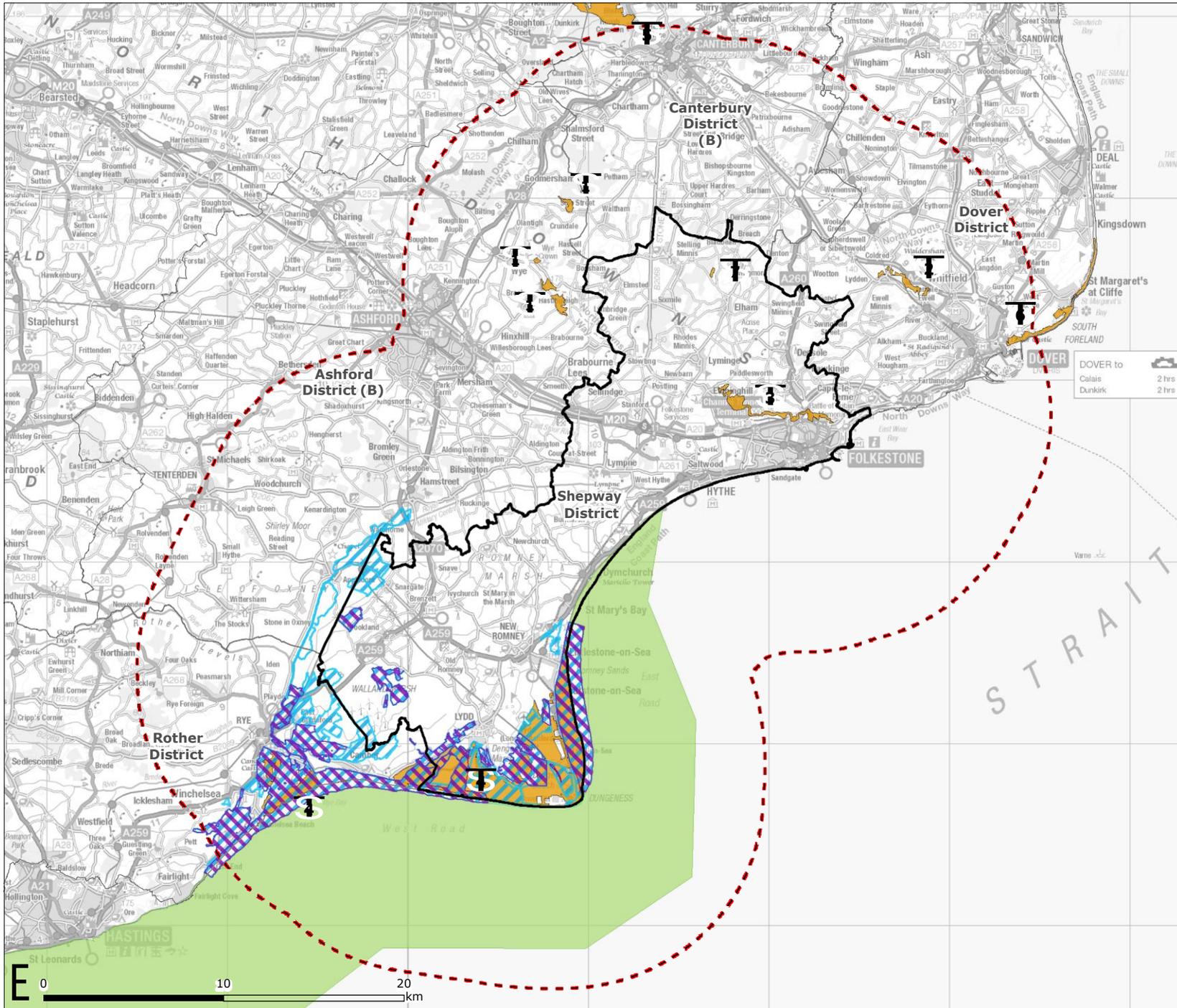
Identification of European sites which may be affected by the Plan and the factors contributing to and defining the integrity of these sites

- 2.2 An initial investigation was undertaken to identify European sites within or adjacent to the Shepway District boundary which may be affected by the Plan. This involved the use of GIS data to map the locations and boundaries of European sites using publicly available data from Natural England. All European sites lying partially or wholly within 10km from the District boundary were included in order to address the fact that Local Plan policies may affect European sites which are located outside the administrative boundary of the plan. This distance was deemed sufficient to ensure that all designated sites that could potentially be affected by development are identified and included in the assessment.
- 2.3 European sites identified within 10km of Shepway District are shown in **Figure 2.1** and include:
- **Dungeness, Romney Marsh and Rye Bay Ramsar**
 - **Dungeness, Romney Marsh and Rye Bay SPA**
 - **Dungeness SAC**
 - **Wye and Crundale Downs SAC**
 - **Lydden and Temple Ewell Downs SAC**
 - **Folkestone to Etchinghill Escarpment SAC**
 - **Blean Complex SAC**
 - **Dover to Kingsdown Cliffs SAC**
 - **Parkgate Down SAC**
- 2.4 The attributes of these sites which contribute to and define their integrity are described in **Appendix 1**. In doing so, reference was made to Standard Data Forms for SACs and SPAs¹² as well as Natural England's Site Improvement Plans¹³. This analysis enabled European site interest features to be identified, along with the features of each site which determine site integrity and the specific sensitivities and threats facing the site. This information was then used to inform an assessment of how the potential impacts of the Plan may affect the integrity of the site in question.

¹² These were obtained from the Joint Nature conservation Committee and Natural England websites (www.jncc.gov.uk and www.naturalengland.org.uk)

¹³ Natural England is in the process of compiling Site Improvement Plans for all Natura 2000 sites in England as part of the Improvement programme for England's Natura 2000 sites (IPENS).

Figure 2.1: Designated European Sites Within 10km of Shepway District



- Shepway District
- 10km buffer from Shepway District boundary
- Other Local Authority boundary
- Dungeness, Romney Marsh and Rye Bay Ramsar site
- Dungeness, Romney Marsh and Rye Bay SPA
- Dungeness, Romney Marsh and Rye Bay Potential SPA
- SAC (see list below - numbered on map)

- 1: Wye & Crundale Downs
- 2: Lydden & Temple Ewell Downs
- 3: Folkestone to Etchinghill Escarpment
- 4: Dungeness
- 5: Blean Complex
- 6: Dover to Kingsdown Cliffs
- 7: Parkgate Down

Source: Shepway District Council, Natural England, JNCC

Map Scale @ A4: 1:300,000



Potential Impacts of the Draft Core Strategy Review on European Sites

2.5 **Table 2.1** below sets out the range of potential impacts that development in general and related activities may have on European sites.

Table 2.1: Potential Impacts and Activities Adversely Affecting European Sites

Broad categories and examples of potential impacts on European sites	Examples of activities responsible for impacts
<p>Physical loss</p> <ul style="list-style-type: none"> • Removal (including offsite effects, e.g. foraging habitat) • Smothering • Habitat degradation 	<p>Development (e.g. housing, employment, infrastructure, tourism) Infilling (e.g. of mines, water bodies) Alterations or works to disused quarries Structural alterations to buildings (bat roosts) Afforestation Tipping Cessation of or inappropriate management for nature conservation Mine collapse</p>
<p>Physical damage</p> <ul style="list-style-type: none"> • Sedimentation / silting • Prevention of natural processes • Habitat degradation • Erosion • Trampling • Fragmentation • Severance / barrier effect • Edge effects • Fire 	<p>Flood defences Dredging Mineral extraction Recreation (e.g. motor cycling, cycling, walking, horse riding, water sports, caving) Development (e.g. infrastructure, tourism, adjacent housing etc.) Vandalism Arson Cessation of or inappropriate management for nature conservation</p>
<p>Non-physical disturbance</p> <ul style="list-style-type: none"> • Noise • Vibration • Light pollution 	<p>Development (e.g. housing, industrial) Recreation (e.g. dog walking, water sports) Industrial activity Mineral extraction Navigation Vehicular traffic Artificial lighting (e.g. street lighting)</p>
<p>Water table/availability</p> <ul style="list-style-type: none"> • Drying • Flooding / storm water • Water level and stability • Water flow (e.g. reduction in velocity of surface water) • Barrier effect (on migratory species) 	<p>Water abstraction Drainage interception (e.g. reservoir, dam, infrastructure and other development) Increased discharge (e.g. drainage, runoff)</p>
<p>Toxic contamination</p> <ul style="list-style-type: none"> • Water pollution • Soil contamination • Air pollution 	<p>Agrochemical application and runoff Navigation Oil / chemical spills Tipping Landfill Vehicular traffic Industrial waste / emissions</p>
<p>Non-toxic contamination</p> <ul style="list-style-type: none"> • Nutrient enrichment (e.g. of soils and water) 	<p>Agricultural runoff Sewage discharge Water abstraction</p>

Broad categories and examples of potential impacts on European sites	Examples of activities responsible for impacts
<ul style="list-style-type: none"> Algal blooms Changes in salinity Changes in thermal regime Changes in turbidity Air pollution (dust) 	Industrial activity Flood defences Navigation Construction
Biological disturbance <ul style="list-style-type: none"> Direct mortality Out-competition by non-native species Selective extraction of species Introduction of disease Rapid population fluctuations Natural succession 	Development (e.g. housing areas with domestic and public gardens) Predation by domestic pets Introduction of non-native species (e.g. from gardens) Fishing Hunting Agriculture Changes in management practices (e.g. grazing regimes, access controls, cutting/clearing)
Recreational pressures <ul style="list-style-type: none"> Visual presence Human presence Direct mortality Nest abandonment Nutrient enrichment Trampling Vandalism Edge effects 	Dog walking/fouling Disturbance from recreation e.g. walking/dog walking, cycling, running, horse riding, and water sports, etc. Vehicular traffic Anti-social activities (e.g. vandalism, fire etc.)

Assessment of 'likely significant effects' of the Draft Core Strategy Review Local Plan

- 2.6 As required under Regulation 102 of the Conservation of Habitats and Species Regulations 2010¹⁴ an assessment of the 'likely significant effects' of the Plan has been undertaken. A screening matrix has been prepared in order to assess which policies and site allocations would be likely to have a significant effect on European sites, either alone or in-combination with other plans and projects. The findings of the screening assessment are summarised in **Chapter 3** and the full matrix can be found in **Appendix 2**. Other plans or projects that could give rise to in-combination effects are considered in **Chapter 3**.

Interpretation of 'likely significant effect'

- 2.7 Relevant case law helps to interpret when effects should be considered as being likely to result in a significant effect, when carrying out HRA of a plan.
- 2.8 In the Waddenzee case¹⁵, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into the Habitats Regulations), including that:
- An effect should be considered 'likely', "if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site" (para 44).
 - An effect should be considered 'significant', "if it undermines the conservation objectives" (para 48).

¹⁴ SI No. 2010/490

¹⁵ ECJ Case C-127/02 "Waddenzee" Jan 2004.

- Where a plan or project has an effect on a site *"but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned"* (para 47).

- 2.9 An opinion delivered to the Court of Justice of the European Union¹⁶ commented that: *"The requirement that an effect in question be 'significant' exists in order to lay down a 'de minimus' threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill."*
- 2.10 This opinion (the 'Sweetman' case) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered 'trivial' or 'de minimus'; referring to such cases as those *"which have no appreciable effect on the site"*. In practice such effects could be screened out as having no likely significant effect; they would be 'insignificant'.

Mitigation provided by the Draft Core Strategy Review Local Plan

- 2.11 Some of the potential effects of the Shepway Draft Core Strategy Review Local Plan could be mitigated through the implementation of other proposals in the Plan itself, such as those relating to the provision of improved sustainable transport links (which would help to mitigate potential increases in air pollution associated with increased vehicle traffic) and the provision of green infrastructure within new developments (which would help mitigate increased pressure from recreational activities at European sites). The extent to which mitigation may be achieved through the Plan was considered during the screening process and has influenced the screening conclusions (see **Chapter 3**).

Screening assumptions and information used in reaching conclusions about likely significant effects

- 2.12 During the screening stage of the HRA, each policy was screened individually, which is consistent with current guidance and practice. For some types of impacts, screening for likely significant effects has been determined on a proximity basis, using GIS data to determine the proximity of potential development locations to the European sites that are the subject of the assessment. However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, during the screening stage a number of assumptions have been applied in relation to assessing the likely significant effects on European sites that may result from the Plan, as described below.

Physical damage/loss

- 2.13 Any development resulting from the Draft Core Strategy Review Local Plan would take place within Shepway District; therefore only European sites within the District boundary could be affected through physical damage or loss of habitat from within the site boundaries. As a result, Wye and Crundale Downs SAC; Lydden and Temple Downs SAC; Blean Complex SAC; and Dover to Kingdown Cliffs SAC, have been screened out of the assessment for physical damage and loss.
- 2.14 No development is proposed in the Draft Core Strategy Review Local Plan within the site boundaries of European sites that lie within Shepway District. Loss of habitat from outside the boundaries of a European site could still have an effect on site integrity if that habitat supports qualifying species from within the European sites. Of the European sites identified, only Dungeness SPA and Ramsar site supports mobile species requiring consideration of offsite habitat use.
- 2.15 Folkestone to Etchinghill Escarpment SAC and Parkgate Down SAC are not designated for their transient species and no development is proposed within their site boundaries, therefore offsite

¹⁶ Advocate General's Opinion to CJEU in Case C-258/11 Sweetman and others v An Bord Pleanala 22nd Nov 2012.

habitat loss or damage resulting from development in Shepway District will not significantly affect these sites.

2.16 Therefore, likely significant effects relating to physical loss of or damage to habitat need only be considered in relation to Dungeness SAC, SPA and Ramsar site and only in relation to offsite habitat.

Non-physical disturbance (noise, vibration and light)

- 2.17 Noise, vibration and lighting effects, e.g. during the construction of new housing or employment development, are most likely to disturb sensitive receptors such as birds and are thus a key consideration with respect to Dungeness SPA and Ramsar, where birds comprise all or part of the qualifying features.
- 2.18 It has been assumed that the effects of noise, vibration and light are most likely to be significant within a distance of 500 metres. There is also evidence of 300 metres being used as a distance up to which certain bird species can be disturbed by the effects of noise¹⁷; however, it has been assumed (on a precautionary basis) that the effects of noise, vibration and light pollution are most likely to cause an adverse effect if development takes place within 500 metres of a European site with qualifying features sensitive to these disturbances, or off-site habitat used for breeding, foraging or roosting.
- 2.19 New policies in the Shepway Draft Core Strategy Review Local Plan, and/or those retained policies which are significantly changed from the adopted Core Strategy, and which are therefore being assessed as part of this HRA, are all located beyond 500m from European Sites, and subsequently the effects of non-physical disturbance have been screened out from this assessment.**

Non-toxic contamination

- 2.20 Non-toxic contamination, including the introduction and spread of invasive species is considered likely to occur when housing and employment sites are located in close proximity to European Sites. New policies in the Shepway Draft Core Strategy Review Local Plan, and/or those retained policies which are significantly changed from the adopted Core Strategy, and which are therefore being assessed as part of this HRA, are all located several kilometres from European Sites, and consequently **the effects of non-toxic contamination have been screened out from this assessment.**

Air pollution

- 2.21 Air pollution is most likely to affect European sites where plant, soil and water habitats are the qualifying features, but some qualifying animal species such as birds at Dungeness may also be affected indirectly through changes in plant communities and/or habitat succession or degradation. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil, affecting the pH and nitrogen availability that can then affect plant health, productivity and species composition.
- 2.22 In terms of vehicle traffic, nitrogen oxides (NO_x, i.e. NO and NO₂) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and NO_x can cause eutrophication of soils and water.
- 2.23 Based on the Highways Agency Design Manual for Road and Bridges (DMRB) Manual Volume 11, Section 3, Part 114 (which was produced to provide advice regarding the design, assessment and operation of trunk roads (including motorways)), it is assumed that air pollution from roads is unlikely to be significant beyond 200m from the road itself. Where increases in traffic volumes are forecast, this 200m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.
- 2.24 European Sites within 10km of Shepway District that are within 200m of strategic roads, and which have therefore been considered susceptible to likely significant effects as a result of air pollution include:

¹⁷ British Wildlife Magazine. October 2007.

- Folkestone to Etchinghill Escarpment SAC – a relatively large proportion of the SAC is <200m from M20, A20, A259 and A260, which form part of the strategic road network around Folkestone.
 - Dover to Kingsdown Cliffs SAC - a very small proportion of the SPA is located within 200m of the A2/Jubilee way, which provides a key strategic route between Folkestone and towns beyond Dover, including St Margaret’s at Cliffe, Kingsdown, and Deal.
 - Blean Complex SAC – a small proportion of the SAC is located c.30m from the A290 at its closest point.
 - Lydden and Temple Downs SAC - a small proportion of the SAC is located within 200m of the A2.
 - Dungeness, Romney Marsh and Rye Bay SPA and Ramsar site is located adjacent to the A259 in several places and part of the Ramsar site is also located within 200m of the A2070.
- 2.25 Dungeness SAC is not located within 200m of a strategic road network but is located within 200m of the Jury’s Gap road which, despite being a minor road, was considered could conceivably represent a journey to work route, and therefore for completeness and in accordance with a precautionary principle was included in the Air Quality Assessment (Nov 2017).
- 2.26 Wye and Crundale Downs SAC and Parkgate Down SAC are not located within 200m of a strategic road and have therefore been screened out of the assessment for air pollution. All of the remaining European sites considered in this assessment have been screened for likely significant effects associated with air pollution potentially resulting from the new or significantly revised housing allocations within the Draft Core Strategy Review Local Plan (Policies SS6-SS9 New Garden Settlement, and CSD9 Sellindge).**

Impacts of recreation

- 2.27 Recreation activities and human presence can have a significant effect on a European site as a result of erosion, trampling or general disturbance, for example through human presence, dog walking and anti-social activities such as fire and vandalism. Where the Draft Core Strategy Review Local Plan policies are likely to result in an increase in the local population, or where an increase in visitor numbers to the area is considered likely, the potential for an increase in visitor numbers and the associated potential impacts at sensitive European sites was considered.
- 2.28 The SACs in the north of the study area are designated for chalk grasslands with orchids. These habitat types are typically low in nutrient levels and therefore recreational activities can damage the soil chemistry as a result of dog walking and associated nitrogen inputs. In addition, unmanaged recreational activities can adversely affect the site through physical damage such as trampling and erosion and from associated problems such as fire, and vandalism.
- 2.29 The Dungeness, Romney Marsh and Rye Bay SPA and Ramsar in the south of the study area are designated for their bird assemblages and are therefore susceptible to the effects of recreational activities associated with disturbance.
- 2.30 In light of the above, all of the European sites considered in this assessment have been screened for likely significant effects associated with recreational disturbance potentially resulting from the new or significantly revised housing allocations within the Draft Core Strategy Review Local Plan (Policies SS6-SS9 New Garden Settlement, and CSD9 Sellindge).**

Water quantity and quality

- 2.31 An increase in demand for water abstraction and treatment resulting from the growth could result in changes in hydrology at European sites, specifically a decrease in water quality or changes to water levels. Depending on the qualifying features and particular vulnerabilities of the European sites, there could be a likely significant effect on site integrity.
- 2.32 The following sites have been screened out from impacts associated with changes in water quantity and quality because they do not have hydrological connectivity with the proposed allocations and are designated for features (e.g. dry grasslands) which are of low sensitivity to

increased water abstraction and treatment associated with the Draft Core Strategy Review Local Plan:

- Blean Complex SAC
- Dover to Kingsdown Cliffs SAC
- Folkestone to Etchinghill Escarpment SAC
- Lydden and Temple Ewell Downs SAC
- Parkgate Down SAC
- Wye and Crundale Downs SAC

2.33 The Dungeness SAC, SPA and Ramsar sites are designated for features which are susceptible to changes in water quantity and quality and have hydrological connectivity with allocations specified within the Plan. **As a result, the potential for likely significant effects associated with hydrological changes will be considered for the Dungeness sites only.**

Summary of screening assumptions

2.34 **Table 2.2** below summarises the screening assumptions that are being applied to the HRA of the Draft Core Strategy Review Local Plan. Where certain types of effects are screened out in **Table 2.2**, they did not need to be considered further so are not referred to in the screening matrix in **Appendix 2**.

Table 2.2: Summary of screening assumptions

European Site	Physical damage/ loss of habitat	Non-physical disturbance	Air pollution	Recreation	Water quantity and quality	Non-toxic contamination (invasive species)
Blean Complex SAC	Screened out	Screened out	Screened in	Screened in	Screened out	Screened out
Dover to Kingsdown Cliffs SAC	Screened out	Screened out	Screened in	Screened in	Screened out	Screened out
Folkestone to Etchinghill Escarpment SAC	Screened out	Screened out	Screened in	Screened in	Screened out	Screened out
Lydden and Temple Ewell Downs SAC	Screened out	Screened out	Screened in	Screened in	Screened out	Screened out
Parkgate Down SAC	Screened out	Screened out	Screened out	Screened in	Screened out	Screened out
Wye and Crundale Downs SAC	Screened out	Screened out	Screened out	Screened in	Screened out	Screened out
Dungeness SAC	Screened in (offsite)	Screened out	Screened in	Screened in	Screened in	Screened out

European Site	Physical damage/ loss of habitat	Non-physical disturbance	Air pollution	Recreation	Water quantity and quality	Non-toxic contamination (invasive species)
	only)					
Dungeness, Romney Marsh and Rye Bay SPA	Screened in (offsite only)	Screened out	Screened in	Screened in	Screened in	Screened out
Dungeness, Romney Marsh and Rye Bay Ramsar	Screened in (offsite only)	Screened out	Screened in	Screened in	Screened in	Screened out

Identification of other plans and projects which may have 'in-combination' effects

- 2.1 Regulation 102 of the Amended Habitats Regulations 2017 requires an Appropriate Assessment where "a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site". The purpose of the in-combination effects assessment is to make sure that the effects of numerous small activities, which alone would not result in a significant effect, are assessed to determine whether their combined effect would be significant. It is therefore necessary to focus the assessment of in-combination effects on those elements of the Plan that are not considered to have significant effects on their own.
- 2.2 As described in **Chapter 1**, Shepway District's adopted Core Strategy (2013) was subject to HRA and therefore, the findings of this HRA are considered to remain valid for those existing policies or those which have not significantly changed. The adopted Core Strategy policies that have not materially changed have only been appraised through consideration of the in-combination effects to the Core Strategy Review as a whole.
- 2.3 For those new or changed policies included in the Shepway Draft Core Strategy Review Local Plan, an assessment of the likelihood of significant in-combination effects has been assessed as part of the screening assessment provided in **Chapter 3**. This is particularly relevant to air quality and as explained in **Chapter 1**, the best practice approach to assessing changes in air quality has changed in light of a High Court judgement known as the 'Ashdown Forest judgement'. As a result, an updated air quality assessment was undertaken as part of this HRA to explicitly consider the effect of the Core Strategy Review Local Plan in-combination with other plans and projects.

3 HRA Screening Assessment

- 3.1 As described in **Chapter 2**, a screening assessment was carried out in order to identify the likely significant effects of the Shepway Draft Core Strategy Review Local Plan on the European sites in and around Shepway District. The full screening matrix, which sets out the decision making process used for this assessment can be found in **Appendix 2** and the findings are summarised below. The screening assessment provided below assesses the likelihood of significant effects at each of the European Sites with reference to specific policies as required.
- 3.2 As described in **Chapter 1** and within the Draft Core Strategy Review Local Plan, the review is being undertaken to assess housing and employment needs over a longer period than the adopted Core Strategy - to 2036/37. However, where the policies within the 2013 Core Strategy are still relevant they are not proposed to be amended and remain unchanged. Other policies in the Draft Core Strategy Review Local Plan include minor changes from the 2013 Core Strategy but will not result in material changes.
- 3.3 The 2013 Core Strategy was subject to an HRA, and therefore the conclusions of the HRA in relation to retained policies or those which do not result in material changes are considered to remain valid. As a result, following a review of the changes, only those new policies or those which propose significant changes from the 2013 Core Strategy have been considered in detail as part of this screening assessment. For clarity, policies included in this screening assessment include the following:
- Policy SS6 – New Garden Settlement – Development Requirements
 - Policy SS7 – New Garden Settlement – Place Shaping Principles
 - Policy SS8 – New Garden Settlement – Sustainability and Healthy New Town Principles
 - Policy SS9 – New Garden Settlement – Infrastructure, Delivery and Management
 - Policy CSD9 – Sellindge Strategy

Policies with Potential to Result in Likely Significant Effects

- 3.4 Of the above policies, SS7, SS8 and SS9 detail specific development control and/or design principles and will not therefore be capable of resulting in Likely Significant Effects to European Sites. As a result, the screening assessment is restricted to the following policies which have potential to result in Likely Significant Effects on European Sites:
- Policy SS6 - A new Garden Settlement within the North Downs Character Area
 - Policy CSD9 – Sellindge Strategy

Updated Air Quality Assessment

- 3.5 In addition to the consideration of the above specific policies, an updated air quality assessment has been undertaken to assess the effect of the revised quantum and location of development specified in the Draft Core Strategy Review Local Plan, both alone, and in-combination with the other plans and projects including strategic growth in Shepway and neighbouring authorities.

Screening assessment

Blean Complex SAC

Air Pollution

- 3.6 The Blean complex is located c.9.9km to the north west of Shepway District and situated on the northwest edge of Canterbury. Air pollution is a recognised threat to the woodland habitats for which this SAC is designated. A relatively small proportion of the SAC is located within 200m of

the A290. This section of road is located over 20 miles from Folkestone and given that it is positioned beyond Canterbury, the majority of traffic journeys between north Kent's coastal towns and Shepway's site allocations would be expected to bypass Canterbury by using the A2 to the west or the A28 to the east. As a result, the potential traffic increases and associated air pollution along this road as a result of the Core Strategy Review Local Plan are likely to be low. Nevertheless, in line with a precautionary approach, this site was included in the updated Air Quality Assessment which concluded that the **Shepway Core Strategy Review will not result in likely significant effects on the Blean Complex SAC as a result of changes in air quality, either alone or in-combination with other plans and projects.**

Recreation

- 3.7 The qualifying features of the Blean Complex SAC are susceptible to the effects of recreation and associated pressures, for example as a result of erosion, nutrient enrichment and fire.
- 3.8 A well-established approach to avoiding recreational pressures is currently being advocated as part of Local Plans throughout the UK, typically involving the use of zones of influence to identify where avoidance and mitigation (such as the provision of alternative open space, and management of the European site) is required.
- 3.9 This approach was initially developed as part of planning decisions which involve the Thames Basin Heaths SPA (TBH SPA). The TBH SPA, located in southern England, is designated for heathland birds and is particularly sensitive to recreational pressures. To ensure adverse effects on the TBH SPA are avoided, a Joint Strategic Partnership involving Natural England (NE) and relevant planning authorities was established. The Partnership produced a Delivery Framework which uses a 'zone' system based on distance from the SPA. Given the particular sensitivities of the TBH SPA to recreational pressure, the findings and recommendations of the Delivery Framework provide useful contextual information in reaching assumptions in relation to recreational impacts associated with the Shepway Draft Core Strategy Review Local Plan.
- 3.10 The TBH Delivery Framework (DF) – which is endorsed by Natural England, and which was scrutinised for robustness and appropriateness by the Technical Assessor of the South East Plan – suggests that at distances between 400m and 5km, residential housing is likely to result in significant effects on Annex II heathland birds as a result of recreation. These distances have been based on various research commissioned by Natural England which investigated people's recreational movements, behaviour and distance travelled to pursue recreational activities at such sites. Importantly, the research indicates that beyond 5km, the effect of recreational pressures from the majority of housing developments is likely to be minimal on these sites. It specifies that large housing schemes of over 50 dwellings may require consideration up to 7km from the SPA.
- 3.11 It is recognised that different habitats and landscapes will have widely varying levels of attractiveness to visitors and accordingly will therefore have different zones of influence (ZoI). For example, the ZoI's of unique coastal landscapes may have ZoIs of over 20km. Nevertheless, the habitat types which comprise the Blean Complex SAC are broadly comparable with those of the TBH SPA including lowland heathland and woodland habitats and therefore the research which has informed the TBH SPA Delivery Framework is considered to be directly relevant in assessing the potential for recreational impacts on this SAC through recreation. As a result of a distance of over 20km from the locations of development proposed in Policies SS6 and CSD9, **the Shepway Draft Core Strategy Review Local Plan is not predicted to result in a significant effect upon the Blean Complex SAC as a result of recreation, either alone or in-combination with other plans and projects.**

Dover to Kingsdown Cliffs SAC

Air pollution

- 3.12 The grassland habitats for which this SAC is designated are susceptible to deposition of nitrogen associated with traffic emissions, which can act as a fertiliser, encouraging non-target plant species to dominate and resulting in increased scrub succession which can limit the extent of, or degrade the quality of, the designated grassland feature.
- 3.13 As specified in the air quality assessment, a single transect was modelled into this SAC, from the A2 (Jubilee Way). This is a major road but also lies 146m from the SAC at its closest. The assessment identified this as the only road within 200m of the SAC that could conceivably

constitute a journey to work route for residents of Shepway. Baseline NOx concentrations throughout the modelled transect were slightly above the critical level.

- 3.14 The air quality assessment forecast that the Shepway Draft Core Strategy Review Local Plan would result in an increase in flows on the A2. However, because of the distance of the road from the SAC this has a limited effect.
- 3.15** The air quality assessment concluded that *“there would be no likely significant effect alone or in-combination with other projects and plans”*, and therefore the **Shepway Draft Core Strategy Review Local Plan will not result in likely significant effects on the Dover to Kingsdown Cliffs SAC, either alone or in-combination with other plans and projects.**

Recreation

- 3.16** The SAC is located 8.5km outside of Shepway, and the distance between policies SS6 and CSD9 is c.20km. It is recognised that the habitats present within the Dover to Kingsdown Cliffs SAC offer a relatively unique attraction for visitors but similarly accessible open grassland sites occur on chalk cliffs and escarpments in the vicinity of the New Garden Settlement and Sellindge, and therefore the contribution of site allocations to increasing visitor pressure on Dover to Kingsdown Cliffs SAC is likely to be negligible. Furthermore, the Site Improvement Plan for this SAC does not list recreational disturbance as a current pressure or threat. In light of the above, the **Shepway Draft Core Strategy Review Local Plan is not predicted to result in a likely significant effect on the Dover to Kingsdown Cliffs SAC as a result of recreation, either alone or in-combination with other plans and projects.**

Folkestone to Etchinghill Escarpment SAC

- 3.17 Key threats to the Folkestone to Etchinghill Escarpment SAC that have been identified in Natural England’s Site Improvement Plan and the HRA screening assumptions are air pollution and recreational pressures.

Air pollution

- 3.18 The SAC is located in the north-east of the Shepway District, situated along a natural chalk escarpment at the northern edge of Folkestone. The SAC is composed of a total area of 263.25 ha, supporting broadleaved woodland and calcareous grasslands. The grassland habitats for which this SAC has been designated are susceptible to atmospheric deposition of nitrogen associated with vehicular emissions. The Site Improvement Plan specifies that current levels of nitrogen deposition exceed the critical load for chalk grassland habitat at the site, and recognises that air pollution as a result of nitrogen deposition is an existing pressure at the site.
- 3.19 The majority of the SAC is located beyond 200m from main roads and therefore the potential for air quality related effects in these areas as a result of the Shepway Draft Core Strategy Review Local Plan is considered minimal. Areas of the SAC at increased risk of air pollution include the following component SSSI units located in the south east of the SAC, in close proximity to main strategic roads on the northern outskirts of Folkestone:
- SSSI Unit 7 – the A260 (Canterbury Road) is adjacent to Sugar Loaf Hill within the SAC; the A20 is adjacent to Castle Hill and Round Hill within the SAC, and the A259 which is 65m to the south of the Sugar Loaf Hill section of the SAC.
 - SSSI Unit 8 – the A260 (Canterbury Road) is adjacent to Wingate Hill within the SAC, and the B2011 is adjacent to Creteway Down at the south easternmost section of the SAC.
- 3.20 Discussion with Philip Williams, the Natural England officer responsible for the site, and a review of the SSSI site condition assessments was undertaken to confirm the current condition of the component SSSI units of the SAC in areas susceptible to the effects of air quality. This approach confirmed that in terms of current condition, Unit 7 of the component Folkestone to Etchinghill Downs Escarpment SSSI is currently in favourable condition. This Unit meets all of the condition objectives including in terms of species diversity, scrub control, an absence of negative factors and the presence of target orchid species. The most recent condition assessment of Unit 8 confirmed that the unit is in ‘unfavourable recovering’ condition due to undergrazing resulting in scrub encroachment. In summary, 95% of the Folkestone to Etchinghill Escarpment SSSI is in ‘favourable’ or ‘favourable recovering’ condition, with less than 5% classified as ‘unfavourable no-change’ or ‘unfavourable declining’. Nevertheless, it is recognised that Common Standards

Monitoring, which is used to monitor the condition of the component SSSIs, was not designed to recognise adverse effects associated with deposition of pollutants, and often habitats are slow to display visible signs of the effects of changes in air quality. Therefore, the absence of apparent adverse factors does not necessarily indicate an absence of effects associated with nutrient enrichment and airborne pollutants.

- 3.21 The Natural England Site Improvement Plan lists air pollution as a key pressure for the site and confirms that the critical load range for calcareous grassland has been exceeded at the site. A review of the Air Pollution Information System (APIS) confirmed that between 2012-2014 nitrogen deposition was found to be on average 14.4 kg N/ha/yr for the SAC which is below the critical load range of 15 – 25kg N/ha/yr. However, a maximum average level of 15.4kg N/ha/yr has been recorded during this period, which is beyond the lower critical range threshold by 0.4kg N/ha/yr.
- 3.22 Natural England as part of the Site Improvement Plan recommended trying to control, reduce and ameliorate atmospheric nitrogen impacts with a Site Nitrogen Action Plan (SNAP), a government improvement programme which aims to identify, tackle and reduce sources of atmospheric nitrogen and trying to restore and maintain habitats to mitigate the impact of the atmospheric nitrogen. However, discussions with Kirk Alexander, Project Manager at the White Cliffs Partnership who oversees management at the site, confirmed that no such plan has yet been produced or implemented.
- 3.23 The Core Strategy Review identifies the strategic need to minimise local carbon emissions, maintain air quality, control pollutants and promote sustainable management as supported by individual policies.
- 3.24 As described above, a key effect of increased nitrogen deposition is nutrient enrichment leading to increased rates of succession and increases in the spread and abundance of dominant species at the expense of target species and species richness. The SSSI units in areas susceptible to nitrogen deposition are currently in 'favourable' or 'unfavourable recovering' condition despite the existing levels of nitrogen in the air, and the historic, long-term presence of main roads in the vicinity of this SAC. This may indicate that the potential effect of nutrient enrichment on chalk grassland habitat at this location is, at least partly, controlled and avoided via the provision of appropriate management such as grazing and mechanical scrub control. Both of the relevant SSSI units are currently being actively managed using both of these methods and therefore in light of the above, the SAC may show some resilience to the effects of nitrogen deposition.
- 3.25 The air quality assessment looked at the key measures of particular relevance regarding air quality impacts. These include; i) concentration of oxides of nitrogen (known as NO_x) in the atmosphere, and ii) direct determination of the rate of the resulting nitrogen deposition. The air quality assessment explains that, in relation to NO_x:

"The main importance is as a source of nitrogen, which is then deposited on adjacent habitats (including directly onto the plants themselves) either directly (known as dry deposition) or washed out in rainfall (known as wet deposition). The deposited nitrogen can then have a range of effects, primarily growth stimulation or inhibition, but also biochemical and physiological effects such as changes to chlorophyll content. NO_x may also have some effects which are un-related to its role in total nitrogen intake (such as the acidity of the gas potentially affecting lipid biosynthesis) but the evidence for these effects is limited and they do not appear to occur until high annual concentrations of NO_x are reached. The guideline atmospheric concentration of NO_x advocated by Government for the protection of vegetation is 30 micrograms per cubic metre (µgm⁻³), known as the Critical Level. This is driven by the role of NO_x in nitrogen deposition and in particular in growth stimulation and inhibition. If the total NO_x concentration in a given area is below the critical level, it is unlikely that nitrogen deposition will be an issue unless there are other sources of nitrogen (e.g. ammonia). If it is above the critical level then local nitrogen deposition from NO_x could be an issue and should be investigated".

- 3.26 The air quality assessment also explains that:

"calculating nitrogen deposition rates rather than relying purely on scrutiny of NO_x concentrations has the advantage of being habitat specific (the critical level for NO_x is entirely generic; in reality different habitats have varying tolerance to nitrogen) and, for many habitats, of being directly relatable to measurable effects on the ground through scrutiny of published dose-response

relationships that do not exist for NOx. Unlike NOx, the nitrogen deposition rate below which current evidence suggests that effects should not arise is different for each habitat”.

- 3.27 In assessing the effects of the Draft Core Strategy Review Local Plan on Folkestone to Etchingill Escarpment SAC, the air quality assessment identified that the baseline NOx concentrations where the SAC lies adjacent to the very busy A20 are high. By 2031, total flows on the A20 are forecast to increase to ‘in combination’, and the bulk of this increase is attributable to the Draft Core Strategy Review Local Plan. Whilst NOx concentrations throughout the modelled transect are forecast to experience a net reduction on all links.
- 3.28 The assessment considered a ‘Do Something’ scenario with the 2017 Base, and showed the forecast ‘in-combination’ change in NOx concentrations to 2031, including the Shepway Draft Core Strategy Review Local Plan, PPLP and strategic growth proposed in neighbouring authorities. It states that:
- “for the A20, it can be seen that the Shepway Draft Core Strategy Partial Review Local Plan will retard the forecast improvement in NOx by a worst-case 3 µgm-3 (10% of the critical level) at the closest point to the A20 and even at 30-40m from the roadside will retard improvement by c. 1 µgm-3. This still leaves a substantial net forecast improvement of c. 26 µgm-3 but is certainly a large retardation. The primary role of NOx for vegetation is as a source of nitrogen. The retardation of forecast improvement attributable to the Shepway Draft Core Strategy Partial Review Local Plan is clearly high enough to mean the resulting nitrogen deposition must be modelled directly to determine what botanical effect would result”.*
- 3.29 In assessing the effect of NOx on nitrogen deposition, the air quality assessment goes on to explain that:
- “since NOx is the main source of nitrogen from vehicle exhaust emissions, the results from the NOx analysis carry over to the nitrogen deposition calculations. However, since most of the emitted NOx is not deposited at the roadside, the change in nitrogen deposition rates due to the Shepway Draft Core Strategy Partial Review Local Plan is forecast to be lower than the change in NOx concentrations”.*
- 3.30 The air quality assessment takes into account forecast improvements in NOx reductions over the plan period. Crucially, the air quality assessment found that, if the forecast improvement is realised in practice, it will bring the deposition rates below the critical load at all links, even adjacent to the A20.
- 3.31 The air quality assessment concluded that:
- “Given that the ‘in combination’ deposition rate is a) forecast to be below the critical load of 15 kgN/ha/yr and well below the rate of 25 kgN/ha/yr at which Caporn et al report a decline in diversity in calcareous grassland, b) forecast to fall further to 2031 and c) only retarded by the Shepway Draft Core Strategy Partial Review Local Plan to a small extent along even the most affected road, **no likely significant effect is expected alone or in combination despite the elevated NOx concentrations”.***
- 3.32 Nevertheless, the conclusions presented within the air quality assessment are based on forecast reductions in NOx and deposition rates over the plan period. Therefore, in line with a precautionary approach, the following recommendation has been made to provide a sufficient level of certainty that likely significant effects would be avoided:
- **For the A20 in particular the Shepway Draft Core Strategy Review Local Plan should include a commitment to monitoring roadside NOx at regular intervals over the plan period in order to track the projected improvements in air quality. This would also enable the introduction of any specific local measures if an improving trend is not recorded in practice. Reporting on this metric could be tied to the planned cycle of reviews of the Plan.**
- 3.33 Notably, the air quality assessment was based on levels of growth as a result of the Shepway Draft Core Strategy Review Local Plan (not just policies SS6 and CSD9) in combination with the PPLP and future predicted traffic levels and air quality trends within the southeast and also accounts for growth in neighbouring authorities. Therefore it takes into account the ‘in-combination’ scenario. In light of the conclusions of the updated air quality assessment, providing that the recommendations made within that assessment, as summarised above, are committed to

and implemented as part of the Shepway Draft Core Strategy Review Local Plan, **it can be concluded that the Shepway Draft Core Strategy Review Local Plan will not result in likely significant effects on the Folkestone to Etchinghill Escarpment SAC as a result of air pollution, either alone or in-combination with other plans and projects.**

Recreation

- 3.34 The chalk grasslands and orchids, for which the SAC is designated, are susceptible to recreational activities including dog walking and associated nutrient enrichment which may alter the soil chemistry and increase the prevalence of competitive species, or by physical disturbances such as through trampling, vandalism, or fire. Due to the proximity of the site to Folkestone and other towns and villages in north east Shepway, parts of the SAC already receive relatively high levels of recreational access. Discussions with the White Cliffs Countryside Partnership (WCCP) Project Manager, Kirk Alexander, revealed recent damage by trampling and theft of the rare orchid species, which has resulted in the management team to consider the potential for additional protective measures to conserve the orchid populations. Nevertheless, recreation at the site is currently well managed and recreation is not identified as a current pressure or threat in Natural England's Site Improvement Plan.
- 3.35 The SAC is managed by the WCCP in partnership with Natural England, to maintain and restore the extent, distribution, structure, function and supporting processes of the chalk grassland and important orchid populations for which the SAC is designated. The condition summary of the Folkestone to Etchinghill Escarpment SSSI, which encompasses the SAC, indicates that 95% of the SSSI is currently in favourable or unfavourable but recovering condition.
- 3.36 The SAC Conservation Management plan is implemented by the WCCP, which seeks to secure chalk downland habitat restoration and creation around Dover and Folkestone through re-introducing grazing management, the provision of new infrastructure and encouraging a partnership between landowners, managers and communities. Key components of the current management of the SAC include cattle-grazing, provision of fencing and gates, invasive species control and mechanical scrub management.
- 3.37 The HRA of the Shepway Core Strategy (2013) identified that north and east Folkestone, Lyminge, Hawkinge, and possibly east Hythe all lie within the core recreational catchment area of the SAC. In particular, housing in Hawkinge was identified as being likely to contribute to increased recreational visits to the SAC. The HRA concluded that a 'worst-case' increase in visitor numbers of 13% would be unlikely to be unmanageable given the current successful management being implemented and the condition of the SAC. However, the HRA of the Core Strategy identified that "*precautionary monitoring of recreational activity at the site is required such that any future need to introduce recreation management can be triggered*". The HRA identified specific safeguards incorporated into the Core Strategy and concluded that, given the mechanisms already in place to manage and monitor the SAC, together with the provision of green infrastructure, the Shepway Core Strategy would be unlikely to lead to significant effects on Folkestone to Etchinghill Escarpment SAC as a result of recreational pressure.
- 3.38 Natural England provided the following response¹⁸ to the conclusions of the Shepway Core Strategy HRA in relation to the effects of recreation:

"The assumptions made by the HRA regarding the four SACs outside of the Dungeness Complex appear reasonable however, some of the survey data is still not available (visitor survey at Folkestone to Etchinghill Escarpment SAC, due for completion Summer 2011) and exactly how some of these assumptions will play out remains a concern for Natural England. The Conclusion drawn for Folkestone to Etchinghill Escarpment and Dover to Kingsdown Cliffs SACs are of particular concern given their location to large housing proposals and also the attraction they pose to tourists in the area.

"We require a revisit of the predicted impacts when the final survey data is complete in order to gain a more robust understanding of the recreational pressure these sites are currently experiencing. Taking a precautionary approach to managing the risks regarding the assumptions made, Natural England require a monitoring programme to be put in place to identify whether these assumptions come to fruition and help inform how development should proceed during the

¹⁸ Natural England Letter Dated 30th September 2011. ref. 29304

lifetime of the plan. Any policies which direct growth to areas where impacts as a result of recreational pressures are possible but unclear due to ongoing development of an evidence base should state that 'The council will revisit the rate, scale, and/or distribution of development across the district to respond to the findings of new evidence'. This is an approach that has been taken in the wider south-east to address similar issues of uncertainty."

- 3.39 In light of the above findings of the HRA of the Core Strategy, and Natural England's subsequent comments, it is clear that a responsive and adaptable approach to implementing the Shepway Draft Core Strategy Review Local Plan will continue to be required to ensure the potential for significant effects are minimised. In particular, this relates to a requirement for monitoring of recreation at the site. The HRA of the Shepway Core Strategy (2013) referred to a visitor strategy which was underway in 2011. However, liaison with Shepway Council, Natural England, and WCCP confirmed that the findings of such a survey had not been published or made available. Nevertheless, this assessment draws on the visitor study completed for the Lydden and Temple Ewell Downs SAC, undertaken to inform the Whitfield Urban Extension. Lydden and Temple Ewell Downs SAC is also designated for the presence of chalk grassland and provides a similar visitor experience to the Folkestone to Etchinghill Downs SAC. Parameters can be drawn from this study to help inform this assessment. The visitor study presented the following key conclusions:
- The majority of visitors to the NNR / SAC are of local origin (50% living within 2km of the NNR / SAC) and make very regular visits, daily or at least several times per week.
 - Most (75%) make the journey to the NNR / SAC by walking rather than driving, although car parking is very limited in close proximity to most of the formal access points.
 - The majority of visitors (75%) live within 4km of the SAC.
 - Dog walking is the primary reason for visiting the NNR / SAC, with almost as many dogs as people encountered during the course of the three surveys.
 - The majority of dogs are allowed off their leads during all or part of their visit.
 - During the summer months there is an increase in the number of people visiting because of the wildlife interest of the area, but dog walking remains the reason that most people visit the NNR / SAC.
 - The majority of visitors walk between 1 – 3km within the NNR / SAC, with less than 10% of visits involving a walk of more than 3km. Visitor access is predominantly within the two easternmost parcels of the NNR /SAC.
 - Routes followed within the NNR / SAC are not random, with visitors following identifiable paths or 'desire lines' for much of their routes.
 - Proximity to the visitors' homes and the lack of alternative sites within walking distance were cited by approximately two thirds of visitors questioned as being the reasons for visiting this particular location rather than another.
- 3.40 The visitor study concluded that the provision of appropriately designed green infrastructure within the Whitfield Urban Extension area will provide effective mitigation for potential impacts on the SAC.
- 3.41 The above study found that 75% of visitors to the SAC lived within 4km. This is in keeping with the results of visitor studies undertaken for heathland SPAs in the south of England, such as the Thames Basin Heaths. A joint strategic partnership (JSP) was formed to address the potential effects of recreational pressures on this SPA. The JSP produced a Delivery Framework which set out the mitigation and avoidance measures required. The primary measure specified within the Delivery Framework is a requirement to provide suitable alternative natural greenspace for new residential development within 5km. This example demonstrates the importance and effectiveness of providing new open space alongside new residential developments in mitigating recreational pressures on sensitive sites.
- 3.42 Another key finding of the Lydden and Temple Ewell Downs Visitor Survey, and similar to the studies undertaken to inform the Thames Basin Heaths Delivery Framework, is that people tend to follow desire lines and utilise regular routes. Whilst this can lead to a concentration of negative effects to specific locations, it may also infer that direct pressures to the wider site can be restricted and efforts to manage and restrict recreational activities can be more efficiently

focused. This is likely to be particularly so for Folkestone to Etchinghill Escarpment SAC because the site is actively managed, including provision of gates and fencing, and the presence of on-site wardening. In addition the qualifying features of grassland and orchids are typically only susceptible to direct effects associated with recreation, for example, plant collecting, localised nutrient enrichment from dogs, and trampling and erosion associated with walking and illegal use of motorbikes. Furthermore, much of the SAC is located on steep escarpments which are not conducive to recreational activities and therefore likely to avoid associated adverse effects.

- 3.43 In light of the above contextual information, Policy SS6, which proposes a New Garden Settlement near Westenhanger, and Policy CSD9, which proposes strategic housing growth at Sellindge, are considered unlikely to contribute to tangible increases in recreational pressures because both are located over 5km from the SAC at their closest point. This conclusion is strengthened by the provision of high quality accessible natural greenspace which will be provided for both of these policies. Indeed, policy SS6 specifies the inclusion of a new Country Park, whilst Policy CSD9 specifies the inclusion of new accessible open space and landscaping. These provisions, particularly the new country park, would be expected to provide an attractive alternative to visiting the SAC.
- 3.44 In addition to the above, the Council will be updating their Green Infrastructure Plan which will identify areas such as Biodiversity Opportunity Areas (BOAs) where enhancements to biodiversity can be targeted. This provides an additional opportunity to incorporate strategic provision of high quality alternative open space which provides an alternative to the use of the Folkestone to Etchinghill Escarpment SAC.
- 3.45 In light of the above information, the Draft Shepway Core Strategy Review Local Plan is not predicted to result in likely significant effects on the Folkestone to Etchinghill Escarpment SAC, either alone or in-combination with other plans and projects as a result of recreation.**

Lydden and Temple Ewell Downs SAC

Air Pollution

- 3.46 Sections of the Lydden and Temple Ewell Downs SAC are within 200m of a section of the A2 which runs between Dover and Canterbury. The air quality assessment confirms that two representative transects were modelled into this SAC, one south-west into the SAC from the A2 and the other north-east into the SAC from Canterbury Road. Both links lie 90-95m from the SAC and this means that the area most affected by vehicle emissions lies well outside the SAC boundary.
- 3.47 The air quality modelling showed that, in terms of NO_x, the Draft Shepway Core Strategy Review Local Plan will play no part in retarding the forecast improvement in NO_x on Canterbury Road and a very small role in retarding the forecast improvement along this section of the A2.
- 3.48 In terms of nitrogen deposition, the Draft Shepway Core Strategy Review Local Plan plays no part in retarding the forecast improvement along Canterbury Road and only a nominal role in retarding improvement along the A2. This was considered ecologically insignificant.
- 3.49 The air quality assessment concluded that given that the 'in combination' deposition rate is a) forecast to be below the critical load and well below the rate at which *Caporn et al* report a decline in diversity in calcareous grassland, b) forecast to fall further to 2031 and c) barely retarded by the Draft Shepway Core Strategy Review Local Plan, no likely significant effect is expected alone or in-combination despite the elevated NO_x concentrations.
- 3.50 Therefore, the Draft Shepway Core Strategy Review Local Plan is not predicted to result in likely significant effects on Lydden and Temple Ewell Downs SAC as a result of changes in air quality, either alone or in-combination with other plans and projects.**

Recreation

- 3.51 This site is located approximately 15km to the northeast of development proposed under Policies SS6 and CSD9 and therefore, in line with the reasoning provided above for the Dover to Kingsdown Cliffs SAC, the distance between these locations is considered sufficient to negate impacts associated with recreational pressures.

- 3.52** As a result, the **Draft Shepway Core Strategy Review Local Plan is not predicted to result in likely significant effects upon the Lydden and Temple Ewell Downs SAC as a result of recreation, either alone or in-combination with other plans and projects.**

Parkgate Down SAC

Recreation

- 3.53 Parkgate Down is currently managed as a nature reserve by the Kent Wildlife Trust (KWT). No public rights of way enter the site and a warden is employed by KWT to manage and monitor the site and oversee implementation of access restrictions to protect sensitive ecological features including the orchid assemblage for which the site is designated as an SAC. The entire site is currently in favourable condition as evidence of the current successful management. Furthermore, the site is located c.9.5km from development proposed in Policies SS6 and CSD9.
- 3.54 As a result, the increase in visitors at the site as a result of the Draft Shepway Core Strategy Review Local Plan is likely to be negligible, and would be unlikely to jeopardise the success of the existing management regime. **Therefore, the Draft Shepway Core Strategy Review Local Plan is not predicted to result in likely significant effects to Parkgate Down SAC, either alone or in-combination with other plans and projects.**

Dungeness SAC and Dungeness, Romney Marsh and Rye Bay SPA/Ramsar

Air Pollution

- 3.55 The air quality assessment reported that the Draft Shepway Core Strategy Review Local Plan will effectively play no part in retarding the forecast improvement in NOx. This is probably due to the small part adjacent roads play in journeys to work to/from Shepway, and forecast additional traffic on key roads by 2031 as a result of the Draft Shepway Core Strategy Review Local Plan is so small that it constitutes a zero increase in Annual Average Daily Traffic (AADT). The air quality assessment concluded that "*there would be no likely significant effect either alone or in-combination with other projects and plans*".
- 3.56 Therefore, the Draft Shepway Core Strategy Review Local Plan will not result in likely significant effects on the Dungeness Complex (SAC, SPA and Ramsar) as a result of air pollution, either alone, or in-combination.**

Physical Damage/Loss (offsite)

- 3.57 Development proposed in Policies SS6 and CSD9 would be located over 12km from the SAC at the closest point and the Draft Shepway Core Strategy Review Local Plan will therefore not result in **likely significant effects on the Dungeness SAC as a result of physical loss or damage, either alone or in-combination.**

Recreation

- 3.58 Recreational pressures associated with population growth in Shepway and the southeast represent a notable threat to the Dungeness complex, including the SAC, SPA and Ramsar. Nevertheless, this threat was recognised by the HRA of the adopted Core Strategy (2013) and the HRA of the PPLP. As a result, a proactive approach to managing recreational pressures is currently underway in the form of a Sustainable Access Strategy (SAS) which sets out how the site will be managed and monitored over the plan period. Both of the above HRAs concluded that, providing the necessary avoidance and mitigation measures were implemented, adverse effects on the integrity of the Dungeness complex would be avoided. These conclusions were supported by Natural England.
- 3.59 Developments proposed under the new and modified policies within the Shepway Draft Core Strategy Review Local Plan, and which are assessed as part of this HRA, are located over 10km from the Dungeness complex. Therefore, their contribution towards recreational pressures on these European sites would not be expected to compromise the effectiveness of the approach to avoidance and mitigation currently being adopted.
- 3.60 As a result, the Shepway Draft Core Strategy Review Local Plan will not result in likely significant effects on the Dungeness European Sites as a result of increases in recreational pressure.**

Water Quality and Quantity

- 3.61 The HRA of the Core Strategies for Rother and Shepway concluded that 'with the recommendations incorporated, *it is considered that the Rother and Shepway Core Strategies would have sufficient safeguards in policy/supporting text that they would be unlikely to lead to significant effects on the Dungeness international sites through water quality impacts*'.
- 3.62 Natural England in their consultation response specified that *“if the recommendations set out in the HRA are addressed as suggested in the Core Strategies then Natural England would support the conclusion of the HRA in relation to water quality”*¹⁹.
- 3.63 With regards to water quantity, Natural England in their consultation response to the HRA of the adopted Core Strategies confirmed that *“If the recommendations set out in the HRA are addressed as suggested in the Core Strategies then Natural England would support the conclusion 7.4.1 of the HRA in relation to water resources”*²⁰.
- 3.64** The developments proposed in the policies being assessed as part of this HRA of the Shepway Draft Core Strategy Review Local Plan are located in the North Downs area, located over 12km from the Dungeness European Sites, and **would therefore not result in likely significant effects on the Dungeness SAC, SPA or Ramsar as a result of changes in water quality or quantity either alone, or in-combination with other plans and projects.**

Wye and Crundale Downs SAC

Recreation

- 3.65 This SAC is located to the west of Shepway, over 5km from development proposed under Policies SS6 and CSD9. As a result the likelihood of recreational impacts associated with the Shepway Draft Core Strategy Review Local Plan is low. When the provision of public open space specified within the plan (including a Country Park as part of SS6) are considered together with the Site Improvement Plan, which does not specify recreational activities as a current pressure or threat, the Shepway Draft Core Strategy Review for Local Plan is considered unlikely to result in significant effects on this site as a result of recreation, either alone or in-combination.
- 3.66** **Therefore, in summary, the Shepway Draft Core Strategy Review Local Plan is not predicted to result in likely significant effects to Wye and Crundale Downs SAC as a result of recreation, either alone or in-combination with other plans and projects.**

Summary of screening conclusions

- 3.67 **Table 3.1** below summarises the screening conclusions reached in this HRA. Those impacts shown in grey were screened out in line with the screening assumptions provided in **Chapter 3**. Impact types for which a conclusion of 'No Likely Significant Effect' (LSE) was reached are shaded in green.

Table 3.1: Summary of screening conclusions

European site	Physical damage/ loss of habitat (Offsite)	Non-physical Disturbance	Air Pollution	Recreational Disturbance	Water Quantity and Quality	Non-toxic contamination (invasive species)
Blean Complex	Screened	Screened out	No LSE	No LSE	Screened	Screened out

¹⁹ URS (Jan 2012) HRA of Rother and Shepway Core Strategies concluded that *“with the recommendations incorporated, it is considered that the Rother and Shepway Core Strategies would have sufficient safeguards in policy/supporting text that they would be unlikely to lead to significant effects on the Dungeness international sites through water quality impacts”*

²⁰ URS (Jan 2012) HRA of Rother and Shepway Core Strategies concluded that *“It is possible to conclude that there is unlikely to be a significant effect on Dungeness SAC/SPA or the Dungeness, Romney Marsh and Rye Bay potential SPA/proposed Ramsar site through abstraction from the Denge gravels aquifer to support housing in the Romney Marsh area since abstraction from these gravels are already being restricted by the Environment Agency to protect the interest features of the international sites”*.

European site	Physical damage/ loss of habitat (Offsite)	Non-physical Disturbance	Air Pollution	Recreational Disturbance	Water Quantity and Quality	Non-toxic contamination (invasive species)
SAC	out				out	
Dover to Kingsdown Cliffs SAC	Screened out	Screened out	No LSE	No LSE	Screened out	Screened out
Folkestone to Etchinghill Escarpment SAC	Screened out	Screened out	No LSE	No LSE	Screened out	Screened out
Lydden and Temple Ewell Downs SAC	Screened out	Screened out	No LSE	No LSE	Screened out	Screened out
Parkgate Down SAC	Screened out	Screened out	Screened out	No LSE	Screened out	Screened out
Wye and Crundale Downs SAC	Screened out	Screened out	Screened out	No LSE	Screened out	Screened out
Dungeness SAC	No LSE	Screened out	No LSE	No LSE	No LSE	Screened out
Dungeness SPA	No LSE	Screened out	No LSE	No LSE	No LSE	Screened out
Dungeness Ramsar	No LSE	Screened out	No LSE	No LSE	No LSE	Screened out

4 HRA Screening Conclusion

- 4.1 Shepway District Council formally adopted its Core Strategy in September 2013. The Core Strategy was subjected to an HRA and it concluded that, following inclusion of appropriate mitigation and avoidance measures, the Core Strategy would avoid adverse effects on the integrity of European sites. This conclusion was supported by Natural England and confirmed to be robust through the Examination in Public. As a result, this HRA of the Shepway Draft Core Strategy Review focused on new policies such as SS6-9 (New Garden Settlement) and those retained policies which have been significantly modified since the adopted Core Strategy, such as CSD9 (Sellindge).
- 4.2 This HRA identified that increases in recreational pressure as a result of population growth represented a key threat to European Sites, particularly Folkestone to Etchinghill Escarpment SAC and the Dungeness complex of European Sites. Nevertheless, the new and modified policies in the Core Strategy Review locate housing allocations several kilometres away from European sites and therefore the potential for Likely Significant Effects is greatly reduced. Furthermore, the site allocations will incorporate extensive areas of accessible natural greenspace thereby further alleviating potential pressures on the European Sites. The potential for such effects is further reduced by the active approach to management and monitoring being advocated, such as via the implementation of the Dungeness Sustainable Access Strategy. As a result, **the Shepway Draft Core Strategy Review will not result in Likely Significant Effects on European Sites.**
- 4.3 Changes in air quality were also identified as a key consideration as part of this HRA, with chalk grassland SACs in the North Downs being particularly susceptible to the effects of road traffic pollution. In light of the Ashdown Forest judgement described in Chapter 1, an updated air quality assessment was completed to ensure that in-combination effects had been fully considered and to inform the conclusions in this HRA. The air quality assessment was based on specific modelling of the location and scale of population growth proposed in Shepway as a result of the Draft Core Strategy Review, in-combination with other plans including the PPLP and those of neighbouring authorities. **The air quality assessment concluded that no likely significant effect is expected alone or in-combination** despite elevated NO_x concentrations. However, the conclusions presented within the air quality assessment were based on forecast reductions in NO_x and deposition rates over the plan period, and therefore, a precautionary approach was advocated which recommended that, for the A20 in particular, **the Shepway Draft Core Strategy Review Local Plan should include a commitment to monitoring roadside NO_x at regular intervals over the plan period in order to track the projected improvements in air quality.** This would also enable the introduction of any specific local measures if an improving trend is not recorded in practice. Reporting on this metric could be tied to the planned cycle of reviews of the Plan.
- 4.4 Other potential sources of impact on European sites included changes in water quality and quantity and loss of offsite habitat upon which qualifying species (e.g. birds) may depend. However, given a lack of hydrological connectivity and the intervening distances between the European sites and the policy allocations, it was concluded that these potential impacts would not result in Likely Significant Effects.
- 4.5 In summary, **providing the above recommendations in relation to air quality are implemented as part of the Plan, the Shepway Draft Core Strategy Review is not predicted to result in Likely Significant Effects on European sites either alone or in-combination.** As a result, the Shepway Draft Core Strategy Review will not result in adverse effects on the integrity of European sites and does not need to be considered further at the Appropriate Assessment stage.

Appendix 1 – Attributes of European Sites

European Site	Area (ha)	Location	Qualifying Features	Key vulnerabilities and environmental conditions to support site integrity
Dungeness, Romney Marsh and Rye Bay Ramsar Site	n/a	A large site partially situated within the District and within 10km of the District boundary.	<p>Criterion 2a</p> <p>Supports a number of rare species of plants:</p> <ul style="list-style-type: none"> • Least lettuce (<i>Lactuca saligna</i>); • Rootless duckweed (<i>Wolffia arrhiza</i>); • Soft hornwort (<i>Ceratophyllum submersum</i>); • Brackish water crowfoot (<i>Ranunculus baudotii</i>); • Hair-like pondweed (<i>Potamogeton trichoides</i>); • Divided sedge (<i>Carex divisa</i>); • Marsh mallow (<i>Althaea officinalis</i>); • sea-heath (<i>Frankenia laevis</i>) <p>The variety of habitats also supports a diverse invertebrate assemblage. More than fifteen wetland Red Data Book (RDB) species have been recorded from the site, including:</p> <ul style="list-style-type: none"> • Ground beetle <i>Omophron limbatum</i>, • Aquatic weevil <i>Bagous cylindrus</i>, • Two species of hoverfly, • Three species of aquatic beetles and the • Medicinal leech (<i>Hirudo medicinalis</i>) <p>Criterion 3c</p> <p>Supports, in winter, an internationally important population of Bewick's swan. In the five winter period 1992/93-1996/97 an average peak count of 179 birds was recorded, representing 1.1% of the North-West European wintering population.</p>	No threats recorded. See Dungeness, Romney Marsh and Rye Bay SPA and Dungeness SAC for threats likely to affect this Ramsar site.

European Site	Area (ha)	Location	Qualifying Features	Key vulnerabilities and environmental conditions to support site integrity
			<p>The site is also notable for nationally important wintering populations of other waterfowl populations.</p> <p>The site also supports a nationally important population of whimbrel (<i>Numenius phaeopus</i>) during spring and autumn passage periods. An average peak count of 275 birds was recorded during the five year period 1987-1991, representing about 5.5% of the British passage population</p>	
Dungeness, Romney Marsh and Rye Bay SPA	1474.04	A fragmented site partially situated in the south of the District and within 10km of the District boundary.	<p>A176(B) <i>Larus melanocephalus</i>: Mediterranean gull</p> <p>A193(B) <i>Sterna hirundo</i>: Common tern</p> <p>A195(B) <i>Sterna albifrons</i>: Little tern</p> <p>A037(NB) <i>Cygnus columbianus bewickii</i>: Bewick swan</p> <p>A056(NB) <i>Anas clypeata</i>: Northern shoveler</p>	<p>Threats identified in Site Improvement Plan include physical loss/damage, recreational disturbance and water quality and quantity.</p> <ul style="list-style-type: none"> • Disturbance to qualifying bird species, particularly during the winter from illicit vehicles is a threat. • Management of non-native species, such as Crassula and Valerian to prevent loss of nesting and foraging habitat. • Lack of scrub control on the natural pit wetlands on the shingle ridges (located on the RSPB reserve) would result in loss of fen species due to overshadowing of the wetlands • Disturbance during the bird breeding season from public accessing the territories of sensitive breeding bird species could impact on breeding success. Recreational activities include dog walking, sand yachting, kite boarding, wind surfing.

European Site	Area (ha)	Location	Qualifying Features	Key vulnerabilities and environmental conditions to support site integrity
				<ul style="list-style-type: none"> Rising sea levels and coastal defences in the area may lead to loss of habitat for qualifying bird species.
Wye and Crundale Downs SAC	112.24	A small fragmented site 1.2km north-west of the District.	H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)	<p>Threats identified in Site Improvement Plan include air pollution.</p> <ul style="list-style-type: none"> Scrub encroachment on the steep slopes of the Devil's Kneading Trough and other areas of the NNR is only partially controlled by grazing, which is leading to a reduction in the extent of grassland feature.
Lydden and Temple Ewell Downs SAC	61.7	A small site situated 2km to the north-east of the District.	H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)	<p>Threats identified in Site Improvement Plan include air pollution and recreational disturbance.</p> <ul style="list-style-type: none"> Public use of the site, primarily dog walking, has increased in the last 10 - 15 years causing trampling to the grassland and potential nutrient increases in the soil, leading to changes in the species composition.
Folkestone to Etchinghill Escarpment SAC	181.94	A linear site situated in the north of the District.	H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)	<p>Threats identified in Site Improvement Plan include air pollution.</p> <ul style="list-style-type: none"> Extensive scrub development on Creteway Down is reducing the extent of the qualifying grassland feature.
Dungeness SAC	3223.56	The site is situated to	S1166 <i>Triturus cristatus</i> : Great crested newt	Threats identified in Site Improvement Plan include

European Site	Area (ha)	Location	Qualifying Features	Key vulnerabilities and environmental conditions to support site integrity
		the south of the District.	<p>H1210 Annual vegetation of drift lines</p> <p>H1220 Perennial vegetation of stony banks</p>	<p>physical loss/damage, recreational disturbance, air pollution, and water quality and quantity.</p> <p>Vehicles: illicit</p> <ul style="list-style-type: none"> • Great crested newt breeding ponds require regular scrub management on the margins to control the negative effects of overshadowing • There is public access throughout the SAC, which allows direct access and disturbance to the vegetated shingle. • Air pollution threatens lichen associated with perennial vegetation of stony banks. Nitrogen exceeds critical load of the site. • Changing water levels has the potential to impact great crested newt breeding habitat.
Blean Complex SAC	520.62	A medium sized site situated 10km from the District boundary.	H9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i>	<p>Threats identified in Site Improvement Plan include air pollution.</p> <ul style="list-style-type: none"> • Although, sensitive qualifying features are recorded to be in favourable condition, nitrogen levels are exceeding the critical load.
Dover to Kingsdown Cliffs SAC	183.85	A linear site situated 9.5km away from the District boundary.	<p>H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts</p> <p>H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)</p>	<p>Threats identified in Site Improvement Plan include air pollution.</p> <ul style="list-style-type: none"> • Air pollution is a risk of increases in tall grasses, a decline in species diversity, increased mineralization, N leaching; surface acidification.

European Site	Area (ha)	Location	Qualifying Features	Key vulnerabilities and environmental conditions to support site integrity
				<ul style="list-style-type: none"> Small areas of the site in private ownership are insufficiently managed. Scrub management needs to be undertaken to retain chalk grassland habitat.
Parkgate Down SAC	6.94	A small site situated in the North of the District.	H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)	<p>Threats identified in Site Improvement Plan include air pollution.</p> <ul style="list-style-type: none"> Although, sensitive qualifying features are recorded to be in favourable condition, nitrogen levels are exceeding the critical load.

Appendix 2 - HRA Screening of the Shepway District Core Strategy Review (Regulation 18 version, 2018)

To help navigate through the matrix, conclusions are also colour coded green where significant effects are likely, orange where likely significant effects are uncertain, and red, where likely significant effects will occur.

Policy Ref.	Significant changes from 2013 Core Strategy	Potential Likely effect	European site(s) potentially affected	Potential mitigation and avoidance factors	Likely significant effect on European site (taking mitigation into account)?
Policy DSD	Policy unchanged from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy SS1: District Spatial Strategy	No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy SS2: Housing and the Economy Growth Strategy	Changes relate to new housing targets specifically in relation to Policies SS6-9 and CSD9. And therefore these changes are assessed under the specific	n/a	n/a	n/a	n/a

Policy Ref.	Significant changes from 2013 Core Strategy	Potential Likely effect	European site(s) potentially affected	Potential mitigation and avoidance factors	Likely significant effect on European site (taking mitigation into account)?
	<p>policies below.</p> <p>No other significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA</p>				
Policy SS3: Place Shaping and Sustainable Settlements Strategy	No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy SS4: Priority Centres of Activity Strategy	No changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy SS5: District Infrastructure Planning	No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy SS6: New Garden Settlement – Development Requirements	New policy for development of a new garden settlement in the North Downs Area.	<p>Loss of offsite habitat</p> <p>Air pollution</p> <p>Changes in water</p>	<p>Dungeness complex (SAC, SPA, Ramsar) – all effects</p> <p>Blean Complex SAC – (air pollution & recreation only)</p> <p>Dover to Kingsdown Cliffs SAC</p>	<p>Likelihood limited by distance from sites</p> <p>Sustainable Access Strategy</p>	No LSE predicted due to distance from European sites and mitigation.

Policy Ref.	Significant changes from 2013 Core Strategy	Potential Likely effect	European site(s) potentially affected	Potential mitigation and avoidance factors	Likely significant effect on European site (taking mitigation into account)?
		quality and quantity Recreational impacts	(air pollution & recreation only) Folkestone to Etchinghill Escarpment SAC (air pollution & recreation only) Lydden and Temple Ewell Downs SAC (air pollution & recreation only) Parkgate Down SAC (recreation only) Wye and Crundale Downs SAC (recreation only)	in place to mitigate recreational effects at Dungeness Existing site management Provision of accessible natural greenspace as part of development masterplan Updated air quality assessment included recommendations for precautionary mitigatory measures to be included in CS.	
Policy SS7: New Garden Settlement – Place Shaping Principles	This policy sets out design principles and will not directly lead to development which could result in LSE's.	n/a	n/a	n/a	n/a

Policy Ref.	Significant changes from 2013 Core Strategy	Potential Likely effect	European site(s) potentially affected	Potential mitigation and avoidance factors	Likely significant effect on European site (taking mitigation into account)?
Policy SS8: New Garden Settlement - Sustainability and healthy New Town Principles	This policy sets out design principles and will not directly lead to development which could result in LSE's.	n/a	n/a	n/a	n/a
Policy SS9: New Garden Settlement - Infrastructure, Delivery and Management	This policy sets out deliver and management principles and will not directly lead to development which could result in LSE's.	n/a	n/a	n/a	n/a
Policy SS10: Spatial Strategy for Folkestone Seafront	No changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
SS11: Spatial Strategy for Shorncliffe Garrison, Folkestone	No changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy CSD1: Balanced Neighbourhoods for Shepway	No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered	n/a	n/a	n/a	n/a

Policy Ref.	Significant changes from 2013 Core Strategy	Potential Likely effect	European site(s) potentially affected	Potential mitigation and avoidance factors	Likely significant effect on European site (taking mitigation into account)?
	further in this HRA				
Policy CSD2: District Residential Needs	No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy CSD3: Rural and Tourism Development of Shepway	No changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy CSD4: Green Infrastructure of Natural Networks, Open Spaces and Recreation	No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy CSD5: Water and Coastal Environment Management in Shepway	No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy CSD6: Central	No significant changes from 2013 Core Strategy and therefore previous HRA	n/a	n/a	n/a	n/a

Policy Ref.	Significant changes from 2013 Core Strategy	Potential Likely effect	European site(s) potentially affected	Potential mitigation and avoidance factors	Likely significant effect on European site (taking mitigation into account)?
Folkestone Strategy	conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA				
Policy CSD7: Hythe Strategy	No changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy CSD8: New Romney Strategy	No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA	n/a	n/a	n/a	n/a
Policy CSD9: Sellindge Strategy	Allocation for housing and mixed used development changed from 250 to 600 dwellings.	Loss of offsite habitat Air pollution Changes in water quality and quantity Recreational impacts	Dungeness complex (SAC, SPA, Ramsar) – all effects Blean Complex SAC – (air pollution & recreation only) Dover to Kingsdown Cliffs SAC (air pollution & recreation only) Folkestone to Etchinghill Escarpment SAC (air pollution & recreation only) Lydden and Temple Ewell Downs SAC (air pollution & recreation only) Parkgate Down SAC (recreation	Likelihood limited by distance from sites Sustainable Access Strategy in place to mitigate recreational effects at Dungeness -existing site management -provision of accessible natural	No LSE predicted due to distance from European sites and mitigation.

Policy Ref.	Significant changes from 2013 Core Strategy	Potential Likely effect	European site(s) potentially affected	Potential mitigation and avoidance factors	Likely significant effect on European site (taking mitigation into account)?
			only) Wye and Crundale Downs SAC (recreation only)	greenspace as part of development masterplan - Updated air quality assessment included recommendations for precautionary mitigatory measures to be included in CS.	

